

Date: 09/04/02

Batch No: 111323

Supplier: Magna

Dart P/O: 8479

Packing Slip: Yes No
Invoice: Yes No
Receipt: Cash Cr

Release Note Attached: Yes No N/A
Waybill Attached: Yes No
Shipment Complete: Yes No N/A
QC6 Inspection OK 09/04/02 N/A
Work Order N/A
09/04/02 N/A
09/04/02 N/A

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
<u>B10</u>	<u>See</u>					
	<u>Packing List</u>					

Initials of receiver (if shipment OK) Level 12

DSayakul

Production/Admin:

Date

Received/Costing

Initial

09/04/02

RIP 10637

CZ

Location

Pg 1 of 1 I009104

SOLD TO:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY , ON
 K6A 1K7

SHIP TO:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY , ON
 K6A 1K7

MTR:Y

INVOICE DATE:	04/02/09
ORDER DATE:	04/01/09
SHIP DATE:	04/02/09
ORDER NUMBER:	W010139
PURCHASE ORDER:	8479

Currency	Sales Person		Ship Via	F.O.B.	Terms		
CANADIAN DOLLARS	ERYCK BLAIS		NIR:R-557065-1	PREPAID	NET 30 DAYS		
Ln	Back Ordered	Ordered	Unit	Description	Shipped	Price Per	Value
				STAINLESS ROUNDS			
		1	PC	SRB 304 3/8" x R/L L021850 13'5" 1 PC/6 LB	1 PC	12.00	QZ 12.00
		1	PC	SRB 304 1/2" x R/L L020290 12'1" 1 PC/8 LB	1 PC	24.00	CZ 24.00
		1	PC	SRB 304 3/4" x R/L L022515 12'1" 1 PC/18 LB	1 PC	52.00	CZ 52.00
		10	PC	SRB 303 3/4" x R/L L022546 12'1" 10 PC/184 LB	10 PC	55.00	CZ 550.00
				STAINLESS SHEET			
		8	PC	SSH 304 2B 16ga x 48" x 96" L023370 8 PC/672 LB	8 PC	170.00	1,360.00

RECEIVED APR 09 2009

04/03/09 11:34:27

Merchandise:	1,998.00
Surcharges:	
No Tax Costs:	
GST	99.90
Total Due:	2,097.90

Title to the goods sent out on this invoice remains with Magna Stainless Div of CSM ULC until such time as this invoice has been paid in full. Unless otherwise noted terms are 30 days. Interest accrues on all overdue accounts at the rate of 1.5% per month compounded monthly.

Q.S.T. # 1213236471

G.S.T. # 881565899 RT0001

I009104

Page: 1 of 1

 SOLD TO:
 DART AEROSPACE LTD
 1270 ABERDEEN STREET

 SHIP TO:
 DART AEROSPACE LTD
 1270 ABERDEEN STREET

 HAWKESBURY , ON
 K6A 1K7
 Contact: CHANTAL

 HAWKESBURY , ON
 K6A 1K7
 Ship Terms: PREPAID

 STOCK
 2

SPECIAL INSTRUCTIONS

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS	ERYCK BLAIS	(613) 632-5200	(613) 632-1053	8479	
Sales Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped
W010139	NET 30 DAYS	NIR:R-557065-1	04/01/09	04/02/09	04/02/09

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
1		PC	STAINLESS ROUNDS SRB 304 3/8" x R/L ✓			1
1		PC	SRB 304 1/2" x R/L ✓	13'5" 6 LB / 1 PC	L021850 16750	1
1		PC	SRB 304 3/4" x R/L ✓	12'1" 8 LB / 1 PC	L020290 16162	1
10		PC	SRB 303 3/4" x R/L ✓	12'1" 18 LB / 1 PC	L022515 246611	1
			209/04/02	12'1" 184 LB / 10 PC	L022546 422249	10
8		PC	STAINLESS SHEET SSH 304 2B 16ga x 48" x 96"	672 LB / 8 PC	L023370 SC19200	8
<i>J. Salouf</i>						
Skids: 1	1150					
Total	Weight:					888 LB

Received by: _____

Date: _____

Signature: _____

Dart Aerospace Ltd

Receiving Slip

Date Apr 2, 2009	Page 1
Receipt Number RCP00010637	

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613) 632-3336
Fax: (613) 632-4443

Purchase From:

Magna Stainless
5775 rue Kieran
St Laurent, Quebec H4S 0A3
Canada

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
			VC-MAG002	P000008479

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	M303R0750	303 Round Bar 0.750 (NOTE: AISI 304/316 NOT ACCEPTABLE) MATERIAL: AISI 303 ROUND BAR B/N111323	121.0000	f	4.583333	CZ 554.58	Apr 02, 2009
	M304R0375	304 ROUND BAR 0.375 (NOTE: AISI 303 NOT ACCEPTABLE) MATERIAL: AISI 304/316 STAINLESS STEEL ROD B/N111323	13.0416	f	1.000000	CZ 13.04	Apr 02, 2009
	M304R500	304 SS roundbar .500 AS ABOVE B/N111323	12.0083	f	2.000000	CZ 24.02	Apr 02, 2009
	M304R0750	304 SS Roundbar .750 AS ABOVE B/N111323	12.0083	f	4.333333	CZ 52.04	Apr 02, 2009
	M304S16GA	304/316 Sheet .063 2B FINISH MATERIAL: AISI 304/316 AS PER 5513 OR 5524 B/N111323	256.0000	sf	5.312500	1,360.00	Apr 02, 2009

Comments:

DART

Purchase Order

Date Apr 01, 2009	Page 1
Purchase Order Number PO00008479	

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613)632-9577
Fax: (613)632-1053

**PACKED
READY**

Vendor Address:

Magna Stainless
5775 rue Kieran
St Laurent, Quebec H4S 0A3
Canada
Phone (514) 339-1211
Fax (514) 339-1105

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Contact	Vendor Number	PO Date	Terms	Ship Via	Expected Arrival
		VC-MAG002	Apr 01, 2009	N30	yours	Apr 09, 2009

Qty. Ordered	Item Number	Description	Expected Arrival	Drop-Ship	Unit Cost	UOM	Extended Price
144.0000	M2024T3S040 ✓	2024-T3 .040 sheet Comments: MATERIAL: 2024-T3 ALUMINUM SHEET PER AMS-QQ-A-250/4 OR AMS 4037	09/04/2009	No	4.479166	sf	645.00
96.0000	M2024T3S050 ✓	2024-T3 .050 sheet Comments: AS ABOVE	09/04/2009	No	5.520800	sf	530.00
120.0000	M303R0750 ✓ <i>Rec'd 12/18/04</i>	303 Round Bar 0.750 Comments: MATERIAL: AISI 303 ROUND BAR (NOTE: AISI 304/316 NOT ACCEPTABLE)	09/04/2009	No	4.583333	f	550.00
12.0000	M304B0375X03000 ✓ <i>Rec'd 13.04.08.04</i>	M304 SS bar .375 x 3.00 Comments: MATERIAL: 304/316 STAINLESS STEEL BAR (NOTE: AISI 303 NOT ACCEPTABLE)	09/04/2009	No	12.083333	f	145.00
12.0000	M304R0375 ✓ <i>Rec'd 13.04.08.04</i>	304 ROUND BAR 0.375 Comments: MATERIAL: AISI 304/316 STAINLESS STEEL ROD (NOTE: AISI 303 NOT ACCEPTABLE)	09/04/2009	No	1.000000	f	12.00
12.0000	M304R500 ✓ <i>Rec'd 12.06.08.03</i>	304 SS roundbar .500 Comments: AS ABOVE	09/04/2009	No	2.000000	f	24.00
12.0000	M304R0750 ✓ <i>Rec'd 12.06.08.03</i>	304 SS Roundbar .750 Comments: AS ABOVE	09/04/2009	No	4.333333	f	52.00
256.0000	M304S16GA	304/316 Sheet .063 Comments: MATERIAL: AISI 304/316 AS PER 5513 OR 5524 2B FINISH	09/04/2009	No	5.312500	sf	1,360.00

Rec'd 12.06.08.03

M111323

Comments:	Tax Summary: GST ONTPST	165.90 0.00	Less: included tax	0.00
			Subtotal	
Entered By: <i>C.L.</i>	CLAVOIE	Total tax	3,318.00	165.90
			Total purchase order in	
Approved By: <i>J.</i>		CAD Dollars	3,483.90	

**MATERIAL CERTIFICATION
REQ'D UPON DELIVERY**

MO18854

POSCO Mill Test Certificate/검사증명서

Certificate No./증명서번호:081027-PRSE-018-002

Date of Issue/발행일자:Oct., 30, 2008

Surface Finish/표면마무리:NO.2B

Order No./계약번호:0003445692

PO No./주문번호:3445692

Supplier/주문자:DAE WOO INTERNATIONAL CORP.

Commodity/품명:STAINLESS COLD ROLLED COIL

Customer/고객사:MAGNA STAINLESS INC.

Spec & Type/규격:ASTM-A240-304

Size/차수 제품번호	Product No. 제품번호	Quan- tity 수량	Weight 중량 (kg)	Heat No. 제강번호	P O S I T I O N	Tensile/인장시험 YS 0.2% TS EL (MPa) (%)			Hard- ness /경도 HRB		D I V I S I O N	Chemical Composition/화학성분(%)														
						C	Si	Mn	P	S	Cr	Ni	Cu	Mo	N	-4	-3	-3	-4	-4	-2	-2	-3	-2	-4	
1.50x1219xC	QEJ1008B	1	5,942	SC19200	T	281	636	56	83.8							L	558	410	1040	320	38	1811	806	330	11	372
1.50x1219xC	QEJ1008C	1	5,942	SC19200	B	285	644	55	85.2							L	558	410	1040	320	38	1811	806	330	11	372
*** Sub Total (040) ***		3			T	281	636	56	83.8																	
1.85x1524xC	QBK0071A	1	5,477	SC18952	T	273	616	57	83.5							L	542	380	1060	310	74	1824	806	340	13	406
1.85x1524xC	QBK0071B	1	5,477	SC18952	B	268	611	57	82.1							L	542	380	1060	310	74	1824	806	340	13	406
1.85x1524xC	Q8K0071C	1	5,487	SC18952	T	273	616	57	83.5							L	542	380	1060	310	74	1824	806	340	13	406
1.85x1524xC	Q8K0071C	1	5,487	SC18952	B	268	611	57	82.1							L	542	380	1060	310	74	1824	806	340	13	406
*** Sub Total (050) ***		3			T	299	636	55	87.8							L	583	437	1095	321	36	1816	802	401	13	350
1.85x1219xC	QEJ0899A	1	5,347	SE38866	T	290	630	56	86.3							L	583	437	1095	321	36	1816	802	401	13	350
1.85x1219xC	QEJ0899B	1	5,347	SE38866	B	299	636	55	87.8							L	583	437	1095	321	36	1816	802	401	13	350
1.85x1219xC	QEJ0899C	1	5,208	SE38866	T	299	636	55	87.8							L	583	437	1095	321	36	1816	802	401	13	350
*** Sub Total (060) ***		3			B	290	630	56	86.3																	
						17,836 (kg)																				
						16,441 (kg)																				
						15,902 (kg)																				

• Position - T : Top, M : Middle, B : Bottom

• Tensile Test. Direction : Transversal, Gauge Length : 50mm(Rectangular).

YP Method : 0.2% off-set

• Division - L: Ladle Analysis

• Chemical Composition Unit: -2:x1/100, -3:x1/1000, -4:x1/10000, -5:x1/100000

• Tr : It is within the standard range(<0.008%) and include trace element.

We hereby certify that the material herein has been made in accordance with the order and specification.

Test Certificate is issued according to EN10204 3.1B.
 • This Mill Test Certificate cannot be copied for any purpose.

Surveyor To:

ORIGINAL
 W.G. Jo
 Chief of material testing section Jo, Won Gook
 09/10/2002

POSCO Pohang Works, 5 Dongchon-dong, Nam-gu, Pohang-si, Gyeongsangbuk-do, 790-785, Korea



10 IMPERIAL CHAMBERS, FIRST FLOOR,
WILSON ROAD BALLARD ESTATE MUMBAI
400 038 INDIA

CUSTOMER :

MAGNA STAINLESS INC (DIV OF CANADIAN
SPECIALTY METALS INC.)
525 MELOCHE AVE. DORVAL
QUEBEC CANADA H9P 2W2

INSPECTION CERTIFICATE

ORDER NO .
075646-AD1

PACKING LIST NO. IMP/100885
INSPECTION NO. IMP/100885/5

DATE
22/09/2008

BUNDLE NO .

2715614,2715623,2715684,2715685,2715686,2715719,2715728,2715750

GRADE
T-304

DESCRIPTION :

STAINLESS STEEL BRIGHT BARS L/C NO.: I700298 DT.: 26/09/2008

COLD DRAWN POLISHED

SIZE (INC)	SHAPE	TOLERANCE	LENGTH (FT)	PIECES	WEIGHT (LBS)
1/2	ROUND	ASTM A484	12' R/L	1083	8870
CHEMICAL ANALYSIS					
HEAT NO.	16162				

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	C6
0.031	1.44	0.41	0.020	0.033	8.06	18.20	0.27	0.50	0.052	0.12

TEST RESULT

.2% YIELD STRENGTH KSI	TENSILE STRENGTH KSI	ELONGATION %	REDUCTION OF AREA %	HARDNESS BHN	GRAIN SIZE
93	109	42	72	221	7

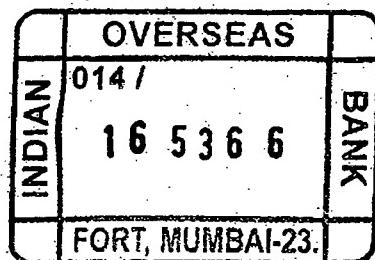
Specification :

MATERIAL CONFIRMS TO ASTM A276-06 COND "A" TYPE 304, ASTM A 262-02A PRACTICE E, ASTM E 112-88(GRAIN SIZE). CERTIFICATION AS PER EN 10204-3.1.

Remarks :

MATERIAL IS FREE MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MINIMUM SOLUTION ANNEALING TEMPERATURE IS 1050 DEGREE CENTIGRADE. SOAKING TIME: 1 HR / INCH. WATER QUINCHED. MICRO:FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES, MACRO:GOOD. COUNTRY OF ORIGIN: INDIA

I hereby certify that the material described above has been tested and complies with the terms of order/contract.



S. Suvarna
WORKS INSPECTOR

S. SUVARNA

✓
0704/02

Acciaierie Valbruna S.p.A.



36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Bestellor/Purchaser/Cient
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Herrsteller/Usine productrice

Oggetto Prove: - Annealed Cold Drawn
Prüfgegenstand/Item Inspected/Finisso

Avviso di Spedizione: D-VI08026527
Lieferanzeige/Packing list/B.L.

Ordine nr: 809002025 STOCK
Bestell/Your order/Commande

Tipo di Elaborazione: E+AOD
Eischmelzungsverfahren/Melting process/Mode d'élaboration

CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005), 3.1

Certificato nr: MEST680179/2008/
Prüfungsergebnis

Conferma ordine nr: EI08011083
Werks/Our Order/Ref nr.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Signe de l'usine productrice



Punzone del Collaudatore:
Stampo del Werkssachverständigen
Inspector's stamp/Pointon de l'essayeur

Specifiche:
Anforderungen / Requirements / Exigences

VAL CANADA 2 303 A,CF
ASTM A314 97 S30300
DOD-F-24669 6 S30300
(0) SEC.II PT.A 2007 EDITION

AMS 5640 U TYPE1
ASTM A320 2008 B8F
MIL-S-862 B/1 303

ASME SA320 2007 B8F (0)
ASTM A582 2005 S30300
QQ-S-764 B/2 303

Qualità: T-303
Werkstoff/Grade/Nuance

Marca: MV188ZHS MAXIVAL
Markenbezeichnung/Brand/Nuance

Punzonatura: T-303
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. n. Item nr. Nr. do poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Toleranz, Allowance Tolérance	Lunghezza - Ft Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pieces	Peso - LB Gewicht Weight Poids	Lotto nr. Losenr., Lot nr., Lot nr.
0130	Round	0,7500	484-06B	12 / 12	422249		6.190	818400620

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind erfüllt.
The material has been furnished in accordance with the requirements
Le matériaux a été trouvé conforme aux exigences

Controllo antimescolanza: OK
Verweichungsprüfung: spectralanalytisch durchgeführt
Antimixing testing performed: OK
Contrôle antimixing fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:
Besichtigung und Ausmessung: ohne Bearbeitung
Visual inspection and dimensional checks: satisfactory
Contrôle visual et dimensions: satisfaisant

TEST	Provetta/Prodotto Specimen/Eprobte Gegenstand/Specimen Brutto/Netto/Drawn With/Out Thickness Larg. diam. spes. mm	°F Posiz. Saggio Prüfung Position Examen II	Snervamento Spanngrenze Yield Stress Limite élastique Rp 0,2% k.s.i.	Snervamento Spanngrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Résistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Einschnürung Reduction of area Striction RA %	Resilienza Krautfähigkeit Impact Value Résistance RA	Durezza Härte Hardness Dureza HB
Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max	30	-	75	-	35	-	50	-
A	12,5	68	L	67		99		42	

1L=longitudinale/Long. O=trasversale/lat. T=tangenziale/tangential

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelze/Cu46	min - max 0,150	1,00	2,00	17,00 19,00	0,60	1,00	8,00 10,00	-	0,15 0,40	0,15 0,40	-	-	-	-
422249	C % 0,037	Si % 0,43	Mn % 1,89	Cr % 17,34	Mo % 0,56	Cu % 0,55	Ni % 8,35	Co % 0,076	P % 0,03	S % 0,32				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0,5 h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination

The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1,s.4.3 by TUEV and LLOYD'S

SA 09/02/04

Vicenza, 09/10/08
VC0008
(Mod. MCER)

Il collaudatore di stabilimento / der Werkssachverständige / Works inspector / L'agent d'usine

M.Rizzotti / Rizzotti

Pagina - 1 di 1

VIRAJ PROFILES LIMITED

10 IMPERIAL CHAMBERS, 1ST FLOOR,
WILSON ROAD, BALLARD ESTATE,
MUMBAI - 400038 INDIA

TEST CERTIFICATE

CUSTOMER:	ORDER NO.	PACKING LIST NO.	INSPECTION NO.	DATE
	P00899	IMP/101282	IMP/101282/13	21/11/2008
	BUNDLE NO.			
	2035235,2035249,2035286			

GRADE
304/304L

DESCRIPTION :
STAINLESS STEEL BRIGHT BARS

SMOOTH TURNED

SIZE (INC)	SHAPE	TOLERANCE	LENGTH (FT)	PIECES	WEIGHT (LBS)
3/8	ROUND	ASTM A484	12 - 14'	962	4822

CHEMICAL ANALYSIS

HEAT NO.	16750									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	Co
0.019	1.46	0.42	0.021	0.032	8.10	18.16	0.34	0.42	0.084	0.14

TEST RESULT

.2% YIELD STRENGTH KSI	TENSILE STRENGTH KSI	ELONGATION %	REDUCTION OF AREA %	HARDNESS BHN	GRAIN SIZE
128	137	42	71	221	7

Specification :

MATERIAL CONFIRMS TO ASTM A182/A-182M-06,A276-06 COND A, A479/A479M-06a COND A,A193/A193M-06a B8 CL-1,A320/A320M-05a B8 CL-1,A484 06b, A388/A388M 05,ASME SA182-04,SA479-04, SA 193-04 B8 CL-1, SA320-04 B8 CL-1. IGC SATISFACTORY AS PER ASTM A 262-02a PRACTICE E AMS 5638G,QQ-S-763F,NACE-MR-017E 2002.AISI 304/304L UNS#S30400/S30403. CERTIFICATION AS PER EN 10204-3.1B.

Remarks :

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD WELD REPAIRS, MICRO: FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES,MACRO:GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED. COUNTRY OF ORIGIN:INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.



WORKS INSPECTOR

S. SUVARNA

F B
000580

Acciaierie Valbruna S.p.A.



36100 VICENZA (Italia) - Viale della scienza, 25 z.l.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Purchaser/Cient
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Haussteller/Item/Usine producere

Avviso di Spedizione: D-VI08011919
Lieferanzeige/Packing list/B.L.

Ordine nr: 804001958 STOCK
Bestell/Your order/Commande

CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005), 3.1

Certificato nr: MEST622937/2008/
Prüfung/Test/Essai

Conferma ordine nr: EI08003473
Werks/Our Order/Ref. n.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Sigle de l'usine producere



Punzone del Collaudatore:
Stampel des Werkssachverständigen
Inspector's stamp/Polycopie de l'essayeur



Oggetto Prove: - Annealed Cold Drawn
Prüfgegenstand/Item Inspected/Finishage

Tipo di Elaborazione: E+AOD
Eischnetzung/Melting process/Mode d'élaboration

Specifiche:
Anforderungen / Requirements / Exigences

VAL CANADA 2 304/304L A,CF
ASME SA182 2007 S30400/03 o
ASME SA479 2007 S30400/03 o
ASTM A262 2002A PRACTICE E
ASTM A320 2007A B8
NACE MR0175* 2003 S30400/03 A 5
(0) SEC.II PT.A 2007 EDITION
(1) SEC.II PT.A 2007 EDITION
(3) SEC.II PT.A 2007 EDITION
(5) * ISO 15156-3

AMS 5639 H S30400
ASME SA193 2007 B8 1
ASTM A182 2007A S30400/03 4
ASTM A276 2006 S30400/03
ASTM A479 2006A S30400/03
QQ-S-763 F 304/304L

AMS 5647 H S30403
ASME SA320 2007 B8 (2)
ASTM A193 2007 B8
ASTM A314 97 S30400/03
MIL-S-862 B/1 304/304L

0Chemical analysis only.
2SEC.II PT.A 2007 EDITION
4Chemical analysis only.

Qualità: T-304L
Werksstoff/Grade/Nuance

Marca: MVAISL MAXIVAL
Markenbezeichnung/Brand/Nuance

Punzonatura: T-304L
Konzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Num. nr. Nr. de poste	Objetto Gegenstand Product description Descript. du produit	Dimensioni - In Abmessungen Dimension Dimension	Toffranza Toleranz Allowance Tolerance	Lunghezza - Ft Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Places Places	- Peso - LB Gewicht Weight Poids	Lotto nr. Lothr. Lot nr. Lot nr.
0120	Round	0,7500	484-06B	12 / 12	246611		9,827	804600860

Sono state soddisfatte tutte le condizioni richieste

Die gestellten Anforderungen sind erfüllt.

The material has been furnished in accordance with the requirements.

Le matière a été fournie conforme aux exigences.

Controllo antimolescolanza: OK
Verwechslungsprüfung: spektrenanalytisch durchgeführt
Annealing testing performed: OK
Contrôle antimélange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:
Besichtigung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional check: satisfactory
Contrôle visuel et dimension: satisfaisant

TEST	Prove/Prüfobjekt Equipment/Équipement Larg. Spess. Spess. Breadth. Diam. Dicke With. Diam. Thickness Larg. diam. spess. MM	°F Posiz. Saggio Position Locate Explorations 1)	Serramento Serraggio Vid. Stress Lame di acciaio Rp 0,2% k.s.i.	Serramento Serraggio Vid. Stress Lame di acciaio	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Einschleifung Reduction of area Section RA %	Resilienza Kerbschlagarbeit Impact Value Résistance Durezza Härte Hardness Dureté HB 1/2 r
Valori richiesti 1 Anforderungen/Required values Values demandées	min max	30	-	75	-	40	-	50
A	12,5	68	L	64	100	47	68	140 235

1L=longitudinale/längs, Q=transversale/quer, T=Tangenziale/tangential

Grain size for ASTM E112 : 5

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min - max 0,030	1,00	2,00	18,00 20,00	1,00	1,00	8,00 10,50	:	0,040	0,030	0,100	:	:	:
246611	C % 0,022	Si % 0,58	Mn % 1,81	Cr % 18,25	Mo % 0,45	Cu % 0,40	Ni % 8,10	Co % 0,100	P % 0,030	S % 0,030	N % 0,081			

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0.5 h/water.

Micro and macro etch test: OK

Intergranular corrosion test per ASTM A262 pract. E: ok.

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination
The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex I, s., 4.3 by TUEV and LLOYD'S

Vicenza, 29/04/08
vc0008
(Mod. MCER)

Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usine
M. Rizzotto

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